

folds of growth. The very tumid figure and incurved umbones are the external characters whereby it may be distinguished from *Tancredia*; the test is likewise thicker than in the latter genus. At present it does not seem that the Cornbrash shell can be separated as a species either from that of the Yorkshire Coralline Oolite, from the Normandic specimens, or from those figured by Buvignier from the Department of the Meuse; but it is desirable that additional British examples of this rare form should be examined. I need hardly suggest to you the expediency of making a rigorous search in the Cornbrash and the Kelloway rock of the vicinity of Cirencester; and believe me to remain, dear Sir,

Yours, &c.,
JOHN LYCETT.

Minchinhampton, October 19, 1857.

XXXVIII.—*Descriptions of new Ceylon Coleoptera.*

By JOHN NIETNER, Colombo, Ceylon.

[Continued from p. 282.]

Tribe CRATOCERIDÆ.

Oosoma, n. g., N.

♂ Corpus ovatum, subconvexum, glabrum. Caput transversim sub-orbiculare, robustum; oculis magnis, ovatis, parum prominulis. Mentum profunde emarginatum, lobis extus rotundatis, apice sub-obtusis, dente minimo, obtuso. Ligula submembranacea minima, angustata, paraglossis maximis, connatis, ligulam totam amplectentibus, apice leviter sed abrupte et sat profunde emarginatis. Palpi art. ult. ovato, apice abruptius angustato leviterque truncato. Clypeus subsemilunariter emarginatus. Labrum transversum, profundius angulate emarginatum, angulis anter. rotundatis, lateribus angulato-rotundatum. Mandibulæ parvæ, validæ, edentatæ, inter med. et apic. arcuatæ. Antennæ robustæ, thoracis med. parum superantibus, art. 1 et 11 subæqualibus, 2-10 parum brevioribus, subæqualibus, 1-3 basi angustatis, reliquis ovatis, 5-11 leviter depressis. Thorax transversus, capite parum latior, basi quadratus, apicem versus leviter angustatus, antice vix emarginatus, postice leviter bisinuatus, elytris fortiter applicatus. Elytra basi quadrata, thoracis latitudine, apice oblique subtruncata, striata. Pedes validi fortiterque armati, subæquales; tibiis costatis, ant. sat profunde emarginatis, apicem versus dilatatis, 4 post. apice 4-calcaratis; tarsis art. 1-4 gradatim minoribus, ant. leviter dilatatis, art. 1° cylindrico-trigono, 2-4 trigonis, post. art. 1-4 subtus longitudinaliter biserratis.

Interesting insects, apparently nearly allied to *Nothopus*, of an appearance which easily distinguishes them from any other

Carabidæ I have hitherto met with in this island. The head is plump, transversely orbicular, immersed up to the eyes in the thorax. The clypeus is narrow, transverse, rather deeply emarginated in the form of a crescent; anterior angles acuminate. The labrum is of thin, translucent texture, deeply angularly emarginated in front; the anterior angles rounded, setose, sides angular, rounded. Mandibles short and thick, curved from the middle to the tip, edentate. Maxillæ simple. Antennæ short, thick, reaching a little beyond the middle of the thorax; joints 3-11 pubescent, 5-11 slightly compressed, 1-3 narrowed at the base, 4-11 oval, 1 and 11, 2-10 of about equal length respectively. Mentum with a straight, deep emargination; lobes rounded externally, rather obtuse at the apex; tooth very small, obtuse. Ligula very small, narrow, slightly dilated towards and rounded at the apex; paraglossæ very large, connate, enveloping the ligula on all sides, the whole slightly truncated at the anterior angles, and slightly, but sharply and pretty deeply emarginated or notched at the centre of the anterior margin. Palpi, both maxillary and labial, with the terminal joint oval, rather abruptly narrowed and slightly truncated at the apex; these characteristics are more distinctly expressed in the labial palpi. All the lower part of the mouth is situated in or forms a cavity. Thorax a little broader than the head, nearly twice as broad as it is long, quadrate at the base, slightly narrowed towards the apex, anterior angles slightly produced; the anterior margin can hardly be called emarginated; two slight sinuosities at the base, firmly applied to the elytra, and as broad as these. Scutellum broad, triangular. The elytra rather abruptly cut away at the apex; internal angles rather obtuse, slightly dehiscent. Legs stout and strongly armed, very much in the manner of my *Cyclosomus dyticolides*, of which the insect under consideration in various respects reminds me most forcibly. The spines of the tibiæ are inserted on ridges, the anterior ones being dilated. The tarsi are all concave on the inner side. I have been unable to discover anything in them by which to distinguish the sexes, not even additional spines or bristles; however, the sexes appear well marked by the difference in size. The anterior tarsi are dilated, the intermediate and posterior ones more and more elongated, and the joints subcylindric; joint 1 of the latter is longer than the three following together; all four have the edges of their concave inner side serrated—an extraordinary circumstance. The highly-developed prosternum reminds me again of *Cyclosomus*.

The habits of these insects are those of the *Amaras*: they live in dry, sandy places under grass and leaves; at certain times they take freely to their wings, and *O. arenaria* may then be

caught in great numbers at night about the lights. This species is very common in all the dry and sandy parts of the neighbourhood of Colombo; the pretty little *O. Gerstæckeri*, however, is scarce.

49. *Oosoma arenaria*, N.

O. supra brunneo-ænea, subtus magis minusve brunnea, pedibus, palpis antennarumque basi testaceis, tarsis, labro limboque angustissimo obscurioribus; capite ad clypei marginem post. punctis 2 impresso; thorace ad basin obsolete 4-foveolato, linea longitud. abbreviata, indistincta, diviso, basi anticeque obsolete striguloso; subtus tenuiter hirsuta. Long. corp. $2\frac{1}{2}$ -3 lin.; lat. $1\frac{1}{4}$ - $1\frac{1}{2}$ lin.

50. *Oosoma Gerstæckeri*, N.

O. supra brunneo-ænea, sæpius glaucescens, elytris dorso dilute brunnescentibus maculis 4 longitud. irregularibus flavis pictis, subtus magis minusve brunnea, pedibus, antennis labroque testaceo-brunneis, palpis antennarumque basi testaceis. Long. corp. $2\frac{1}{4}$ lin.; lat. $1\frac{1}{2}$ lin.

Excepting in colour, not essentially differing from the former. However, the marks of the thorax are more distinct, and the four obsolete pits are replaced by two longitudinal impressions; the whole insect is, moreover, more graceful than the former. The maculæ of the elytra may be said to commence at the basal angles of the thorax, which are of a similar, but less distinct, colour. The true humeral maculæ begin at the base of the elytra, and stretch nearly to the middle as a thick straight line or narrow parallelogram, the principal part of which occupies the sixth interstice, a spot being thrown out on either side. The apical maculæ commence a little below the middle, and are essentially composed of small squares heaped upon each other, so as to form steps or an inverted pyramid.

As this design varies more or less in different individuals, it can be of no importance to describe it in a more detailed manner; suffice it to say, that apparently in no instance does any part of it reach either the inner or outer margin, the field upon which it is displayed being enclosed by the first and seventh striæ. The brownish-green metallic upper surface of the insect in some individuals throws off a fine blue reflex, very perceptible on the head and thorax. The part of the back enclosed by the maculæ is washed out to a light brown, with the exception of the suture, which remains dark.

In naming this pretty species after Dr. Gerstæcker of the Royal Museum, Berlin, I wished to pay that gentleman the only trifling compliment circumstances admit of, in acknowledgement for various useful hints he has kindly communicated to me.

51. *Chlænien princeps*, N.

C. aureo-viridis, scutello cupreo, elytris nigro-viridibus ad basin et infra marginem viridibus, sutura nigra, subtus piceus, coxis trochanteribusque 4 ant. dilutioribus, femoribus trochanteribusque 2 post. testaceis, tibiis tarsisque obscurioribus, ore antennisque brunneis, labro, mandibulis limboque castaneis; capite obsolete ruguloso, punctulato; antennis art. 3^o quarti prope longitudine; menti dente forti laciniis apice rotundatis; thorace ovato-quadrato, latitudine parum longiore, angulis ant. subrectis, post. rotundatis, basi fortiter 2-impresso, punctato; scutello canaliculato; elytris striatis, in striis punctatis, ad strias, præsertim apicem versus, tenuiter pilosis. Long. corp. 8 lin.; lat. 3 lin.

Specimen singulum f. prope Colombo sub lapidibus cepi.

A very handsome species, distinguished by its size and comparatively great breadth. The clypeus is impressed with two setigerous pits near the anterior corners. The labrum is transverse, slightly sinuated in front, narrowed at the base, and has the anterior angles strongly rounded-off. The last joint of both the maxillary and labial palpi is cylindric and truncated at the apex; in the maxillary it is shorter than in the labial ones, in the latter somewhat narrowed at the base and slightly inflated at the middle; both appear slightly compressed at the apex. The elytra are strongly rounded at the apex. The insect has a very strong smell, somewhat like musk, about it.

52. *Chlænien maleolens*, N.

C. capite, thorace scutelloque obscure cupreo-viridi-glauculentibus, elytris obscurioribus, pubescentibus, maculis 2 subapicalibus flavis ornatis, subtus piceus, pedibus testaceis, ore antennisque brunneis, mandibulis limboque castaneis; capite ad clypei marginem post. profundius 2-foveolato, punctulato, occipite leviter transversim ruguloso; antennis art. 3^o quarto subæquali vel paulo brevioribus; menti dente apice leviter sinuato; thorace subquadrato, lateribus leviter rotundatis, profundius punctulato atque levissime transversim ruguloso, ad basin 2-impresso, parce piloso; elytris densius pubescentibus, striatis, in interstitiis 3-8 utrinque ante apicem macula suborbiculari flava ornatis. Long. corp. 6½ lin.

Specimen singulum m. prope Colombo cepi.

Also a handsome and rare species, smelling strongly and disagreeably of creosote. The head, thorax and scutellum are of a dull bluish-green colour, with a copper reflex from the back; the elytra are of a blackish-green, pubescent, and adorned with two yellow spots between the middle and apex; these are of irregular rounded outline, and stretch from the middle of the third interstice across to the eighth stria. The fourth joint of the maxillary palpi is subcylindric, that of the labial ones larger,

plump, and rather triangular. Tooth of the mentum not bifid, but truncated and merely slightly sinuated at the apex. The elytra are narrowed at the apex.

53. *Chlænienus Dohrnii*, N.

C. elongatus, parallelus, capite thoraceque viridi-nitentibus, elytris viridi-glauculentibus maculis 2 apicalibus flavis pictis, subtus dilute piceus, apicem versus brunneus, pedibus testaceis, ore antennisque brunneis; capite sublævi nitidissimo; antennis art. 2^o parvo, reliquis longitudine subæquali; palpis maxill. art. 4^o cylindrico, lab. eodem subtrigono; thorace ovato-quadrato, crebrius punctato, basi 2-impresso; elytris striatis, punctatis, pubescentibus, 2-maculatis, maculis subapicalibus prolongatis, interstitia 2-8 et angulum apicalem occupantibus, flavis. Long. corp. 6 lin.; lat. 2 lin.

Specimen singulum f. prope Colombo nocte ad lumen cepi.

The elongated and parallel shape of the body distinguishes this species at first sight; it is very pretty and scarce, but has otherwise nothing remarkable in its construction. However, I may add to the above description, that the mentum is large, the lobes obtuse at the apex, and the tooth but slightly sinuated at the tip. The ligula is of the usual construction, the paraglossæ obtuse and ciliated at the apex. The last two joints of the labial palpi are rather elongated, whilst in the maxillary ones they are the reverse; the former have the terminal joint triangular, the latter cylindric; both are strongly truncated at the tip. The head is middling, with two impressions in front of the eyes; the mandibles are rather more curved than usual; the labrum is emarginated in front; the antennæ are rather short and stout, reaching only to the base of the thorax; the latter is a little broader than the head, and of an ovato-quadrangle form. The elytra and legs are simple.

I have named this species after the president of the Entomological Society of Stettin, to whom I am indebted for much entomological information.

54. *Harpalus (Ophonus) senilis*, N.

H. oblongo-ovatus, subdepressus, punctato-rugosus, griseo-pubescentibus, supra æneus, subtus piceus, ore pectoreque dilutioribus, pedibus testaceis, antennis basi palpisque apice flavis; capite robusto, antice rotundato, postice parum angustato, thorace vix angustiore; antennis humeros attingentibus, art. 2^o parvo, reliquis longitudine subæqualibus; mandibulis obconicis, robustis, una unidentata, altera incisa; labro vix emarginato; palpis art. 4^o ovato, apice abruptius angustato, leviter truncato; thorace transverso, longitudine tertia parte latiore, elytris vix angustiore, lateribus rotundato, infra med. leviter angustato, basi subquadrato, hic vix, antice leviter emarginato, angulis apicalibus obtuse acuminatis, basalibus subrecte rotundatis; elytris

punctato-striatis, apice fortius 2-sinuatis et angustatis; tarsis art. 4^o cordato. Long. corp. 4½ lin.; lat. 1½ lin.]

Prope Colombo sat copiosus.

This, as well as the succeeding two species, flies very commonly into the rooms at night during the rainy weather. The present species is a fine, comparatively large, robust insect. I may add to the above description, that the emargination of the mentum is of middling size, its lobes rounded externally, and its tooth just marked in the shape of a slight obtuse rising at the bottom of the emargination. The ligula is very small and narrow, the paraglossæ very large, adhering to it, and enveloping it fully and on all sides; the whole is very slightly cut away at the apical angles, and slightly, but abruptly and rather deeply, notched at the centre of the anterior margin. I may further notice, that some of the individuals before me have the apex of the maxillary palpi prolonged, cylindric, and slightly bent inwards. As this is not a sexual distinction, and as the insects thus distinguished differ in no other respect from the rest, I look upon them as curious varieties.

55. *Harpalus (Ophonus) rugosus*, N.

H. præcedenti simillimus sed sesqui minor, magis rugosus, antennis robustioribus art. 5–11 ovatis, leviter depressis, colore supra parum obscuriore, subtus dilutiore, pedibus albidis, coxis tarsisque brunneis, antennis totis castaneis. Long. corp. 3½ lin.

The small size and, upon close inspection, the other peculiarities just pointed out, readily distinguish this species from the former, in spite of their close affinity in other respects. They are both equally common about Colombo.

56. *Harpalus (Selenophorus) Colombensis*, N.

H. statura præcedentis sed gracilior, glaber, supra læte æneus, subtus subcastaneus, pedibus albidis, coxis, tarsis, antennis palpisque testaceis, ore brunneo; capite transversim ruguloso; antennis præcedente tenuioribus, palpibus gracilioribus apice magis angustatis; labro basin versus leviter dilatato; mandibulis infra apicem abruptius arcuatis, una uni-, altera bi-dentata; thorace lateribus præcedente minus rotundato, basi minus angustato, hic rugoso-punctato, antice leviter longitudinaliter strigoso; elytris striatis, parce punctulatis, in interstitiis 3^o, 5^o et 7^o punctis majoribus impressis. Long. corp. 3 lin.

Prope Colombo sat copiosus.

A pretty little insect, very distinct from the preceding two. I may add, that it also differs somewhat in the paraglossæ, the interior angles of which are distinct.

Tribe HARPALIDÆ?

Lepithrix, n. g., N.

Corpus oblongum, robustum, subconvexum. Caput ovatum, mediocre; oculis semiglobosis, prominulis. Mentum leviter subsemilunariter emarginatum, lobis extus rotundatis, dente vel parvo, obtuso vel nullo. Ligula mediocris, cornea, oblonge quadrata, apice transversim truncata, libera, paraglossis cylindricis apice truncatis, sat robustis, marginem ant. parum superantibus. Palpi articulo ultimo elliptico, truncato. Labrum apicem versus angustatum, apice rotundatum. Mandibulæ validæ, apice arcuatæ, una uni-, altera bidentata. Antennæ filiformes humeros parum superantes, art. 2° parvo, reliquis longitudine subæqualibus. Thorax mediocris longitudine parum latior, antice vix, postice haud emarginatus, lateribus leviter rotundatus, basi parum angustatus, angulis omnibus rotundatis, margine elevato. Elytra ovata, infra med. parum dilatata, apice leviter angustata et acuminata. Pedes subæquales, tibiis apice bicalcaratis, calcaribus intus subtiliter serratis, ant. leviter emarginatis, tarsis 2 ant. art. 1-3 leviter dilatatis gradatim minoribus, art. 1° cylindrico, 2° obcordato, 3° trigono, omnes art. 4° *maris* bilobo, *femine* bifido, art. 5° magno, unguibus validis, simplicibus; *subtus* tarsis 2 ant. art. 1-4, intermed. art. 2-4 squamularum longepedunculatarum seriebus duabus munitis.

57. *Lepithrix foliolosa*, N.

L. glabra, supra obscure brunnea, thoracis elytrorumque limbo testaceo, *subtus* brunneo-testacea, pedibus albidis, antennis art. 3 primis flavis, reliquis nigrescentibus, palpibus art. ultimo testaceo, reliquis flavis; thorace ad angulos basales profundius foveolato; elytris striatis; prosterno canaliculato. Long. corp. 3-4 lin.

Specimina nonnulla mens. Octob. prope Colombo nocte ad lumen cepi.

The internal vesture of the tarsi of these otherwise inconspicuous insects constitutes their most important character, and is altogether of a very interesting nature. I proceed at once to describe it at full length, premising that *I believe* I have both male and female before me. The individual which I take to be the male is smaller and of a darker colour than the other. The legs, with the exception of the tarsi, are the same in both sexes. They are of middling strength; the tibiæ are furnished with two spurs at the inner side of the apex, which spurs are finely serrated along their inner edge; the tarsi have joints 1-3 of the first pair slightly dilated; the posterior pair is elongated, subcylindric; and the intermediate one forms a passage between the two. Joints 1-3 of the first pair gradually decrease in size, joint 1 being at the same time subcylindric, joint 2 rather cordiform, and joint 3 rather triangular; joint 4 in all six tarsi is bilobed in the male and bifid in the female, this character being, however, less distinctly expressed in the two posterior tarsi than

in the four anterior ones; joint 5 is large, and the claws strong and simple; a membranaceous process of triangular form covers the base of the latter above.

The internal vesture of the four anterior tarsi of the *male* is of the following description. The inner part of joints 1-4 of the two anterior ones is furnished with two longitudinal series of pedunculate squamulæ, which are of a broad triangular form, and lie like tiles upon each other, covering the sole of the tarsus; they are flanked by bristles, which partake of the nature of scales, being dilated in the shape of a lancet. These squamulæ are without any particular colour, they are unconnected amongst themselves, their edges are entire, and they attain their highest development at the apex of the fourth joint; in fact, their development is gradual, from the base of the first joint to the apex of the fourth. The intermediate tarsi, although not dilated, are similarly provided with the anterior ones, but only at the apex of the second and at the third and fourth joints, the squamulæ being of rather a square shape triangularly prolonged and pedunculate at the base; the first joint is naked in this pair.

The tarsi of the *female* are very much the same as those of the male, excepting the fourth joint, which, as above mentioned, is bifid. A further distinction exists, however, in the squamulæ. In the two anterior tarsi of the female these are present at the apex only of the first and second joints (hardly distinct at the former); however, they are well developed in the third, and very highly in the fourth joint; the squamulaceous bristles are less conspicuous, but the peduncle attains extraordinary length in the fourth joint; the squamulæ do not cover each other like tiles, but stand more freely and loosely, and are curved inwards so as nearly to touch in the middle; their shape is that of an elongated triangle; they are veined, and their apical edge is serrated. Being such, and placed upon long, slender peduncles, they forcibly remind me of the leaflets of certain Ferns (*Adiantum*), and hence the specific name *foliolosa*. The intermediate tarsi are similarly provided, but, as in the male, the first joint is naked, and the second furnished with scales at the apex only. The lower edges of the two posterior tarsi are very neatly fenced-in with small, closely-set spines.

I feel doubtful as to the affinities of these insects, especially if in reality I have described both sexes, and if the vesture of the intermediate tarsi is allowed to be of the same importance as that of the anterior ones; however, I think they must find a place amongst the Harpalidæ as restricted by Lacordaire. I must not omit to mention that the tooth of the mentum appears to be variable, one of my specimens (a male) being decidedly without it, whilst another is furnished with a small, obtuse one.